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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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08/452,395 05/26/95 HARVEY

EXAMINER

LM61/0217

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ART. UNIT	PAPER NUMBER
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DATE MAILED: 2715

02/17/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 9/24/97

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 2-43 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
☐ Claim(s) _____ is/are allowed.
☒ Claim(s) 2-43 is/are rejected.
☐ Claim(s) _____ is/are objected to.
☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.
☐ received in Application No. (Series Code/Serial Number) _____
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of Reference Cited, PTO-892
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
☐ Interview Summary, PTO-413
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

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DETAILED ACTION

1. This Office Action is responsive to the amendment(s) filed 9/24/97.

DOUBLE PATENTING V.S. PATENTS

2. After reviewing the restriction requirement under 35 USC 121 in US Patent 5,233,654 it is believed that the claims of the instant application are subject to a double patenting analysis against US Patent 5,233,654 and US Patent 5,335,277.

3. In view of further analysis and applicant's arguments, the rejection of the claims in the instant application under double patenting based on the broad analysis of *In re Schneller* as set forth in paragraphs 7-10 of the previous Office Action has been withdrawn.

DOUBLE PATENTING BETWEEN APPLICATIONS

4. Conflicts exist between claims of the following related co-pending applications which includes the present application:

#	Ser. No.	#	Ser. No.	#	Ser. No.
1	397371	2	397582	3	397636
4	435757	5	435758	6	437044
7	437045	8	437629	9	437635
10	437791	11	437819	12	437864
13	437887	14	437937	15	438011
16	438206	17	438216	18	438659
19	439668	20	439670	21	440657

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22	440837	23	441027	24	441033
25	441575	26	441577	27	441701
28	441749	29	441821	30	441880
31	441942	32	441996	33	442165
34	442327	35	442335	36	442369
37	442383	38	442505	39	442507
40	444643	41	444756	42	444757
43	444758	44	444781	45	444786
46	444787	47	444788	48	444887
49	445045	50	445054	51	445290
52	445294	53	445296	54	445328
55	446123	56	446124	57	446429
58	446430	59	446431	60	446432
61	446494	62	446553	63	446579
64	447380	65	447414	66	447415
67	447416	68	447446	69	447447
70	447448	71	447449	72	447496
73	447502	74	447529	75	447611
76	447621	77	447679	78	447711
79	447712	80	447724	81	447726

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82	447826	83	447908	84	447938
85	447974	86	447977	87	448099
88	448116	89	448141	90	448143
91	448175	92	448251	93	448309
94	448326	95	448643	96	448644
97	448662	98	448667	99	448794
100	448810	101	448833	102	448915
103	448916	104	448917	105	448976
106	448977	107	448978	108	448979
109	449097	110	449110	111	449248
112	449263	113	449281	114	449291
115	449302	116	449351	117	449369
118	449411	119	449413	120	449523
121	449530	122	449531	123	449532
124	449652	125	449697	126	449702
127	449717	128	449718	129	449798
130	449800	131	449829	132	449867
133	449901	134	450680	135	451203
136	451377	137	451496	138	451746
139	452395	140	458566	141	458699

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142	458760	143	459216	144	459217
145	459218	146	459506	147	459507
148	459521	149	459522	150	459788
151	460043	152	460081	153	460085
154	460120	155	460187	156	460240
157	460256	158	460274	159	460387
160	460394	161	460401	162	460556
163	460557	164	460591	165	460592
166	460634	167	460642	168	460668
169	460677	170	460711	171	460713
172	460743	173	460765	174	460766
175	460770	176	460793	177	460817
178	466887	179	466888	180	466890
181	466894	182	467045	183	467904
184	468044	185	468323	186	468324
187	468641	188	468736	189	468994
190	469056	191	469059	192	469078
193	469103	194	469106	195	469107
196	469108	197	469109	198	469355
199	469496	200	469517	201	469612

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202	469623	203	469624	204	469626
205	470051	206	470052	207	470053
208	470054	209	470236	210	470447
211	470448	212	470476	213	470570
214	470571	215	471024	216	471191
217	471238	218	471239	219	471240
220	472066	221	472399	222	472462
223	472980	224	473213	225	473224
226	473484	227	473927	228	473996
229	473997	230	473998	231	473999
232	474119	233	474139	234	474145
235	474146	236	474147	237	474496
238	474674	239	474963	240	474964
241	475341	242	475342	243	477547
244	477564	245	477570	246	477660
247	477711	248	477712	249	477805
250	477955	251	478044	252	478107
253	478544	254	478633	255	478767
256	478794	257	478858	258	478864
259	478908	260	479042	261	479215

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262	479216	263	479217	264	479374
265	479375	266	479414	267	479523
268	479524	269	479667	270	480059
271	480060	272	480383	273	480392
274	480740	275	481074	276	482573
277	482574	278	482857	279	483054
280	483169	281	483174	282	483269
283	483980	284	484275	285	484276
286	484858	287	484865	288	485282
289	485283	290	485507	291	485775
292	486258	293	486259	294	486265
295	486266	296	486297	297	487155
298	487397	299	487408	300	487410
301	487411	302	487428	303	487506
304	487516	305	487526	306	487536
307	487546	308	487556	309	487565
310	487649	311	487851	312	487895
313	487980	314	487981	315	487982
316	487984	317	488032	318	488058
319	488378	320	488383	321	488436

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322	488438	323	488439	324	488619
325	488620	326	498002	327	511491
328	485773	329	113329		

5. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. The attached Appendix provides clear evidence that such conflicting claims exist between the 329 related co-pending applications identified above. However, an analysis of all claims in the 329 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

In order to resolve the conflict between applications, applicant is required to either:

- (1) file terminal disclaimers in each of the related 329 applications terminally disclaiming each of the other 329 applications, or;
- (2) provide an affidavit attesting to the fact that all claims in the 329 applications have been reviewed by applicant and that no conflicting claims exists between the applications. Applicant should provide all relevant factual information including the specific steps taken to insure that no conflicting claims exist between the applications, or;
- (3) resolve all conflicts between claims in the above identified 329 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 329 applications (note: the five examples in the attached Appendix are

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merely illustrative of the overall problem. Only correcting the five identified conflicts would not satisfy the requirement).

Failure to comply with the above requirement will result in abandonment of the application.

INFORMATION DISCLOSURE STATEMENTS

6. Receipt is acknowledged of applicant's Information Disclosure Statements filed 4/7/97.

In view of the unusually large number of references cited in the instant application (approximately 2,200 originally and 645 in the subsequent IDS) and the failure of applicant to point out why such a large number of references is warranted, these references have been considered in accordance with 37 C.F.R. 1.97 and 1.98 to the best ability by the examiner with the time and resources available.

The foreign language references cited therein where there is no statement of relevance or no translation are not in compliance with 37 C.F.R. 1.98 and have not been considered.

Numerous references listed in the IDS are subsequent to applicant's latest effective filing date of 9/11/87, therefore, the relevancy of these references is unclear. Also cited are numerous references that are apparently unrelated to the subject matter of the instant invention such as: US Patent # 33,189 directed toward a beehive, GB 1565319 directed toward a chemical compound, a cover sheet with only the word "ZING", a computer printout from a library search with the words "LST" on it and a page of business cards including that of co-inventor James Cuddihy, among others. The relevancy of these references cannot be ascertained. Furthermore, there are several

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database search results listed in foreign languages (such as German) which list only the title and document information; no copy has been provided, therefore, these references have not been considered.

Claim Objections

7. Claims 21-24 are objected to because of the following informalities:

Regarding claim 21, line 17, "data" should be --datum--. Line 25, "stations" should be --station--.

Appropriate correction is required.

CLAIM REJECTIONS - 35 USC § 112

8. Claims 2-43 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

37 C.F.R. 1.75(d)(1) requires that:

"the terms and the phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description".

The following limitations were not supported by the specification as originally filed:

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In claim 2, "gathering information on the use of a control signal at a receiver station", "receiver station", "at least one controllable device", "remote station" and "control signal" and furthermore, it is unclear to the support of the steps in the order in which are being claimed.

In claim 5, it is unclear to the support of the combination of claim 4 with external storage device.

In claim 6, it is unclear to the support of the combination of claim 4 with an external heater device.

In claim 7, it is unclear to the support of the combination of claim 4 with an external air conditioner.

In claim 8, it is unclear to the support of the combination of claim 4 with an external radio receiver

In claim 9, it is unclear to the support of the combination of claim 4 with an external computer.

In claim 10, it is unclear to the support of the combination of claim 4 with an external video recorder.

In claim 11, it is unclear to the support of the combination of claim 4 with an external printer.

In claim 12, it is unclear to the support of the combination of claim 4 with an external laser disk.

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In claim 13, "a multimedia receiving apparatus for gathering information on the use of a control signal", "plurality of input ports", "processor", "remote data collection station" and furthermore, it is unclear to the support of the steps in the order in which are being claimed.

In claim 14, it is unclear to the support of the combination of claim 13 with the steps of storing the information and delaying as recited in the claim.

In claim 15, it is unclear to the support of the combination of claim 14 with the delay being calculated to reduce communication costs.

In claim 16, it is unclear to the support of the combination of claim 13 with the step of communicating information using a telephone interface.

In claim 18, it is unclear to the support of the combination of claim 2 with the steps of generating a bill for the use of the control signal as recited in the instant claim.

In claim 19, it is unclear to the support of the combination of claim 2 with the steps of storing the information and delaying as recited in the claim.

In claim 20, it is unclear to the support of the combination of claim 13 with the output port being oppressively connected to an internal device.

In claims 21-24, it is unclear to the support of all the combinations of the claimed steps in the order in which being claimed. It is unclear to which of the control signals in the original specification do the claimed "instruct signal", "code or datum", "instruction" and "locally inputted datum" refer to.

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In claim 25, it is unclear to the support of all the combinations of the claimed steps in the order in which being claimed. It is unclear to which of the control signals in the original specification do the claimed “instruct signal”, “code or datum”, “identification signals” and “control signal”.

In claims 26-28, it is unclear to the support of all the combinations of the claimed steps in the order in which being claimed. It is unclear to the support of “instruct signal”, “code or datum...serve as evidence of at least one passing...” and “control signal”.

In claim 29, it is unclear to the support of “at least one of a code and datum to serve as evidence of at least one of ...” and “evidencing said at least one of said combined and said sequential output of said received television programming...”. It is unclear to the support of “at least one instruct signal”. It is also unclear to the support of all the combinations of the claimed steps in the order in which being claimed.

In claim 30, it is unclear to the support of the combination of claim 29 with each of the steps as claimed in this instant claim.

In claims 31-43, it is unclear to the support of all the combinations of the claimed steps in the order in which being claimed. It is also unclear to the support of “control signal”, “instruct signal”, “code and datum...evidencing...”, “second instruction” and “instruction”.

Claim Rejections - 35 USC § 112

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9. Claims 2-24 and 26-30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, it is unclear what is meant by gathering information on the use of a control signal. Does it mean that the control signal is used to gather information or does it means how many times the control signal are being used. It is unclear what information is being referred to as the "information of the passing of said identified control signal".

Regarding claim 13, it is unclear what is meant by gathering information on the use of a control signal. Does it mean that the control signal is used to gather information or does it means how many times the control signal are used. It is unclear what information is being referred to as the "information of the passing of said identified control signal". The phrase "said step of passing to a remote data collection data" on line 13 lacks antecedent basis.

Regarding claim 20, it is unclear what is meant by "output port is oppressively connected to an internal device".

Regarding claim 21, if the station detects the presence of either the code or datum and not the instruction, it is unclear whether or not step (3) would be performed since step (3) is performed in response to the detected instruction and not the detected code or datum. Since step (3) would not be performed, it is unclear how step (4) is carried out from step (2) to step (4) without step (3). It is unclear to which of the control signals in the original specification do the claimed "instruct signal", "code or datum", "instruction" and "locally inputted datum" refer to.

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Regarding claim 26, it is unclear which of the headend station, intermediate station and subscriber station, etc... in the original specification do the claimed "remote intermediate transmitter station", "origination transmitter station", "receiver station" and "controllable apparatus" refer to. It is also unclear to which of the control signals in the original specification do "instruct signal", "control signal" and "code or datum" refer to. It is further unclear what is a "plurality of selective transfer devices".

Regarding claim 27, it is unclear what signals are being embedded.

Regarding claim 29, it is unclear to which of the control signals in the original specification do the "instruct signal" and "at least one of a code and datum" refer to. It is also unclear to which of the components in the original specification do "at least one controllable apparatus", "receiver station apparatus" and "computer".

Claim Rejections - 35 USC § 102

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 2-4, 6-7, 13, 17-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Osborn [US 3,803,491].

Regarding claim 2, Osborn discloses a "receiver station" (remote unit such as elements 13a-13d, see Fig. 1) having a "plurality of inputs" (plurality of incoming signals), a "processor" (60) and "at least one controllable device" (89-95 and also control mechanisms), see Figs. 1-2. Osborn shows that the "receiver station" (remote unit) transfers gathered information (such as

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status information of the controllable devices) to a "remote station" (12), see Col. 1, lines 35-51 and Col. 9, lines 12-40. Osborn also shows the steps of identifying a control signal and searching for the control signal identified (see filters 45-47, detectors 48-50 and word count decoder 60), passing the control signal from the step of searching from the processor (60) to the at least one controllable device (89-95) and communicating information on the passing of the identified control signal from the receiver station to the remote station (note the data readout circuits, oscillator, radio frequency amplifier and low pass filter), see Fig. 2.

Regarding claim 3, Osborn shows that the "receiver station" is a television receiver station (41-42), see Fig. 2.

Regarding claim 4, Osborn shows that the "control signal" is directed to an "external device" (such as a water meter), see Fig. 2.

Regarding claim 6, Osborn shows the external device is a heater (heating system), see Col. 1, lines 40-41.

Regarding claim 7, Osborn shows the external device is an air conditioner (252), see Fig. 11.

Regarding claim 13, Osborn shows a "multimedia receiving apparatus" (remote unit, such as 13a-13d) comprising a "plurality of input ports" (45-47), an "output port" (output of a selected one of a controllable devices, such as 89-95 and 250, 252 and 254 of Figs. 2 and 11) and a "processor" (48-50, 59-61), see Fig. 2. Note that the word count decoder 60 identifies a control signal and passes it to one of the controllable devices (88-95) in order to communicate

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"information of the passing of said identified control signal from said step of passing to a remote data collection station" (this is met by passing the status of one of the controllable devices identified by the control signal to the master station (claimed "remote data collection station")).

Regarding claim 17, Osborn shows an "external device" (met by one of the controllable devices such as 88-95 and 250, 252 and 254, see Figs. 2 and 11.

Regarding claim 18, Osborn shows billing at the "remote station" (master station), see Col. 4, lines 28-30.

Regarding claim 20, Osborn shows the "output port" (output of a selected controllable devices) is "oppressively" connected to an "internal device" (data readout circuits), see Fig. 2.

12. Claims 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Block et al [US 4,225,884].

Regarding claim 21, Block discloses a method of communicating subscriber station information (such as the stored program codes of the programs viewed, SPCs) from a subscriber station to at least one remote collection station (billing data gathering computer). Block shows inputting an instruct signal (TPC) which is effective at the subscriber station (12) to control an apparatus (22) and a code (SPC) to serve as evidence of the passing of the instruct signal to a controllable apparatus (22). Noted that when the subscriber station receives TPC code from central station 10, this is evidence as to the passing of the instruct signal to the controllable apparatus (which is the receiver 22). Block shows detecting the presence of an instruction (command from the billing data gathering computer to send the SPC), which is effective at the

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subscriber station (12) to generate one subscriber station specific data (which is the stored viewed program code, SPC). Block shows processing at the subscriber station (12) a locally inputted datum (processed the RSC in order to scramble the incoming signal) and generating at least one subscriber station specific datum (stored SPC) and communicating the generated at least one subscriber station specific data to a transmitter (inherent since the stored SPC would be transmitted to the remote billing data gathering computer). Block also shows transmitting at least one subscriber station specific datum (SPC) to the remote collection station (transmitting the SPC to the billing data gathering computer), see Fig. 1.

Regarding claim 22, Fig. 1 of Block shows the subscriber through the subscriber control unit 30 selects (or input) the instruct signal and the control and storage unit for storing a subscriber instruction (such as accepting to pay for the program, SPC). The subscriber unit 12 receives the mass medium program which is the one corresponding to the stored SPC.

Regarding claim 23, Fig. 1 of Block shows storing a subscriber instruction to process one of mass medium programs (SPC). Note that the program corresponding to the stored SPC would be processed and presented to the subscriber for viewing.

Regarding claim 24, Block shows the instruct signal (TPC) is detected in the information transmission from a programming source (central station). A processor (26) is programed to respond to an instruct signal (received TPC) from the programming source (central station). The subscriber station 12 receives an information transmission (SPROG) from a programming source (central station). Block shows inputting at least some of the information transmission to a control

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signal detector (inherent in control and storage unit 26), detecting the instruct signal (detecting the TPC) and passing the instruct signal to the processor (26), see Fig. 1.

13. Claims 25-27, 36-37 and 40-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Campbell et al [US 4,536,791].

Regarding claim 25, Campbell shows a receiver station (40) to include a receiver and a processor (104), see Fig. 6. Fig. 6 shows that receiver station (40) for receiving identification signals (subscriber addressing data words and channel control word, see Fig. 11) that identify specific signal content for at least one of a plurality of one of concurrent cablecast signal transmission. Since receiver station receives identification signals such as subscriber ID code, it is inherent in the controller 104 to compare the stored subscriber ID code with the received subscriber ID code. Fig. 6 shows the tuning the receiver (108 and 106). Once the receiver is tuned to the channel, some of the desired signal transmission are input to the processor (104). Campbell also shows responding to an instruct signal (screen control data) detected in the desired signal transmission which is effective to control a receiver station apparatus (such as the display in the receiver station 40) and a code or datum (such as the input page display) to serve as evidence of the passing of the instruct signal to a controllable apparatus (display).

Regarding claim 26, Campbell shows a method of controlling a remote intermediate transmitter station (head end station) to communicate at least one instruct signal (television programming) to at least one receiver station (40), with the remote transmitter station (headend station) including at least a cablecast transmitter (inherent in Fig. 1), a plurality of selective

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transfer devices (data sources and program sources) each operatively connected to the cablecast transmitter, a receiver (56 inherently includes a receiver to receive from the program sources) for receiving the at least one instruct signal (television programming) from at least one origination transmitter station (program sources), a control signal detector (50) and a controller (60 and 80) capable of controlling at least one of the plurality of selective transfer devices, with the remote transmitter station (headend station) adapted to detect the presence of at least one control signal (channel signal word and the subscriber addressing data words) and to deliver at the cablecast transmitter the at least one instruct signal (television programming), see Figs. 1-2. Campbell also shows receiving at least one instruct signal (television programming) and at least one of a code and datum (vertical sync) at the least one origination transmitter station (program source) and delivering the at least one instruct signal (television programming) and at least one of a code and datum (vertical sync) to at least one origination transmitter (inherent in Fig. 1), at least one instruct signal being operative at the at least one receiver station (40) to control at least one controllable apparatus (television set), at least one of the code and datum being operative at the at least one receiver station (40) to serve as evidence of the passing of the at least one instruct signal to said at least one controllable apparatus (since the vertical sync controls the sync of the television programming, if the television programming is sync correctly, then the viewer can view the television programming; and thus it is evidence of the passing of the television programming), receiving the at least one control signal (control data words) and it is inherent that the control signal is transmitted before a specific time.

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Regarding claim 27, Campbell shows the control signal (control data words) is embedded in the instruct signal (television programming).

Regarding claim 36, Campbell shows a method of controlling a network having a plurality of receiver stations (40, it is inherent in Campbell to have plurality of receiver stations) each of which includes a cablecast signal receiver (see Fig. 6), at least one processor (104) and a signal detector (114), see Fig. 6. Campbell shows receiving at a cablecast transmitter station (headend station) at least one instruct signal (control data words and screen control data words) which is effective at the plurality of receiver stations to control at least one controllable apparatus (television set) and at least one of a code and a datum (vertical sync) to serve as evidence of passing of the at least one instruct signal to at least one controllable apparatus (if the viewer receives television programming using the vertical sync, this is evidence that the instruct signal has been passed through), transferring at least one instruct signal and at least one of code and datum to at least one transmitter (it is inherent that the headend station has a cablecast transmitter), receiving at least one control signal (subscriber addressing data words), the control signal designating at least one receiver station (subscriber ID code) in which at least one instruct signal is addressed and transferring at least one control signal from transmitter. Campbell shows the at least one transmitter cablecasting the instruct signal (screen control data word), the at least one of code and datum (vertical sync) and at least one control signal (subscriber addressing data words).

Regarding claim 37, Campbell shows that one of the instruct signal and control signal is embedded in the non-visible portion (vertical blanking portion).

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Regarding claim 40, Campbell shows a controller (80) to control a switch (98), see Fig. 5. Campbell also shows a signal which is effective at the transmitter station (headend station) to instruct transmission (timing signal), see Fig. 5.

Regarding claim 41, Campbell shows the channel control data word containing the channel of transmission.

Regarding claim 42, Campbell shows downloadable executable code (control data words to be transmitted to the processor 104), see Fig. 6.

Regarding claim 43, Campbell shows the receiver station (40) which is adapted to detect the presence of one of the control signal and programmed to respond to the instruct signal on the basis of the location of a signal in an information transmission (data extractor), see Fig. 6.

Claim Rejections - 35 USC § 103

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15. Claims 5, 8-12, 14-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osborn [US 3,803,491].

Regarding claims 5 and 8-12, although Osborn does not show a storage device, a radio receiver, a computer, a video recorder, printer and a laser disk , each of these devices is well known in the art. Since Osborn shows the desirability to employ the same coaxial cable for transmitting various information and data signals to and from the subscriber's location to the central station or master station from which the television signals are transmitted (see Col. 1, lines

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15-19) and a storage device, a radio receiver, a computer, a video recorder, printer and a laser disk are all well known devices, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Osborn with either a storage device, a radio receiver, a computer, a video recorder, printer or a laser disk in order to transmit various information and data signals to and from these devices to the master station.

Regarding claims 14 and 19, Osborn shows delaying for a predetermined time before the step of communicating the information back to the master station (see wait period of Fig. 5), but does not show storing information before transmission. Since it is well known in the art to store information before transmission, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Osborn with a storage device for storing the information before transmission in order to free-up the processor.

Regarding claim 15, although Osborn does not explicitly show the delay is calculated to reduce communication costs, it would have been obvious to one of ordinary skill in the art that the delay would be calculated to reduce communication costs since the farthest remote unit would have a longer delay and the nearest remote unit would obviously have a shorter delay so as to ensure that the transmission between the remote unit and the master station would not be wasted.

Regarding claim 16, Osborn does not specifically show a "telephone interface". However, the Examiner takes Official Notice that it is extremely well known in the art for cable television system to be connected to the telephone system through a telephone interface in order to exchange information through the telephone system. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to modify Osborn with a telephone interface so as to permit the cable television system of Osborn to exchange information using the telephone system.

16. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al [US 4,536,791] in view of Lambert [US 4,381,522].

Regarding claim 28, Campbell does not show a schedule to communicate television programmings.

Lambert teaches transmitting a schedule indicating when the television programmings would be transmitted. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Campbell by transmitting a schedule indicating when the television programmings would be transmitted in order to let the subscribers know when their desired programs would be transmitted.

17. Claims 31-35 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al [US 4,536,791].

Regarding claim 31, Campbell shows receiving at least one instruction (control data words including screen control data words) and at least one of a code and a datum (vertical sync), at least one instruction having effect at a user station (40) to control a receiver station apparatus (40), encoding at least one instruction (see Fig. 5) and at least one control signal for directing a processor (104) at a user station (40) to control the least one controllable apparatus (television set), see Figs. 2, 5 and 6. Although Campbell does not specifically show storing control signal

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and code or datum in conjunction with the program, it would have been obvious to one of ordinary skill in the art to store these signals in conjunction with the program in order to assure that the program and these control signals would be together.

Regarding claims 32 and 34, Campbell shows supplemental program material. The second control signal is met by one of the other control signals such as either the channel control words, subscriber control words or the screen control words.

Regarding claim 33, Campbell shows transmitting a video signal and the video overlay generated by the processor to a plurality of receiver stations.

Regarding claim 35, Campbell shows embedding control signals including vertical sync, channel control data words, subscriber addressing data words and other control signals in the non-visible portion (vertical blanking portion), see Fig. 2A. Campbell also show a program code.

Regarding claim 38, although Campbell does not specifically show the claimed feature, it would have been obvious to one of ordinary skill in the art in view of Campbell to have the identification of signals asynchronously and have the receivers respond asynchronously since Campbell teaches a receiver responding to an instruction signal.

Regarding claim 39, Campbell does not specifically show a memory or recorder. It would have been obvious to one of ordinary skill in the art for the data source to come from a memory or recorder for storing the data information.

Response to Arguments

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18. Applicant's arguments with respect to claims 2-43 have been considered but are moot in view of the new ground(s) of rejection.

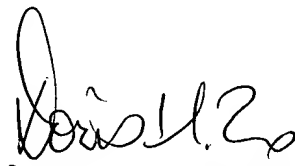
Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. To whose telephone number is (703) 305-4827. The examiner can normally be reached on Monday-Friday from 6:40 a.m. to 3:10 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Eisenzopf, can be reached on (703) 305-4711.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

D. To
February 5, 1998


DORIS H. TO 2/5/98
Patent Examiner

APPENDIX

(Examples of Claim Conflicts between Applications)

Comparison of claim 12 from Serial No. 08/469,626 to claim 24 from Serial No. 08/487,980.

Claim 12

A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium program material to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of mass medium programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of mass medium programming, a mass medium programming receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of mass medium programming in response to detected specific

Claim 24

A method of controlling a remote intermediate mass medium programming transmitter station to communicate mass medium program material to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of mass medium programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of mass medium programming, a mass medium programming receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of mass medium programming in response to detected specific

control signals, and to deliver at its broadcast or cablecast transmitter one or more units of mass medium program, said method of communicating comprising the steps of:

(1) receiving a unit of mass medium programming to be transmitted by the remote intermediate mass medium programming transmitter station and delivering said unit of mass medium programming to a transmitter, said unit of mass medium programming having an instruct signal which is effective at the one or more receiver stations to *control a sequence of events*;

(2) receiving one or more control signals which at the remote intermediate mass medium programming transmitter station operate to control the communication of said unit of mass medium programming; and

(3) transmitting said one or more control signals to said

control signals, and to deliver at its broadcast or cablecast transmitter one or more units of mass medium program, said method of communicating comprising the steps of:

(1) receiving a unit of mass medium programming to be transmitted by the remote intermediate mass medium programming transmitter station and delivering said unit of mass medium programming to a transmitter, said unit of mass medium programming having an instruct signal which is effective at the one or more receiver stations to *decode a portion of a multichannel broadcast or cablecast transmission*;

(2) receiving one or more control signals which at the remote intermediate mass medium programming transmitter station operate to control the communication of said unit of mass medium programming; and

(3) transmitting said one or more control signals to said

transmitter before a specific time.

transmitter before a specific time.

Comparison of claim 24 from Serial No. 08/488,620 to claim 23 from Serial No. 08/477,660.

Claim 24

A method of controlling a computer to communicate a television signal in a television network, said network *having* a television transmitter station and a television receiver station, said receiver station having a computer for communicating of television signals, said method comprising the steps of:

programming *said receiver station* to search for data embedded in a television signal;

inputting an identifier code that designates a unit of computer software;

storing a television signal on a file storage medium at a storage device associated with said computer;

receiving from a remote source an information transmission that contains a control signal;

Claim 23

A method of controlling a computer to communicate a television signal in a television network, said network *comprised of* a television transmitter station and a television receiver station, said receiver station having a computer for communicating of television signals, said method comprising the steps of:

programming *a processor* to search for data embedded in a television signal;

inputting an identifier code that designates a unit of computer software;

storing a television signal on a file storage medium at a storage device associated with said computer;

receiving from a remote source an information transmission that contains a control signal;

selecting a storage location associated with said computer in response to said control signal;

transferring said unit of computer software to said storage device;

storing said unit of software on said file storage medium;

executing a technique for communicating a file stored on a disk associated with a computer; and

communicating said television signal in accordance with said technique.

selecting a storage location associated with said computer in response to said control signal;

transferring said unit of computer software to said storage device
and

storing said unit of software on said file storage medium,

thereby to enable said computer to execute a technique for communication a file stored on a disk associated with a computer and

communicate said television signal in accordance with said technique.

Comparison of claim 23 from Serial No. 08/488,032 to claim 58 from Serial No. 08/451,746.

Claim 23

A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

(1) inputting a viewer's or participant's reaction at a subscriber station;

(2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of subscriber input;

(3) determining the presence of said subscriber input at said subscriber station by processing said viewer's or participant's reaction;

(4) processing an instruct signal which is effective to *coordinate data processing with communication or presentation* of television programming at said

Claim 58

A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

(1) inputting a viewer's or participant's reaction at a subscriber station;

(2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of *said specific* subscriber input;

(3) determining the presence of said *specific* subscriber input at said subscriber station by processing said viewer's or participant's reaction;

(4) processing an instruct signal which is effective to *receive, generate, or present output to supplement* television

subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing.

programming at said subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing.

Comparison of claim 47 from Serial No. 08/469,106 to claim 46 from Serial No. 08/487,649.

Claim 47

A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

(1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to *implement a scheme for generating a control signal* and delivering the instruct signal to a transmitter;

(2) receiving at said transmitter station one or more

Claim 46

A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

(1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to *select a broadcast or cablecast signalling scheme and generate a signal in consequence of said selected broadcast or cablecast signalling scheme* and delivering the instruct signal to a transmitter;

(2) receiving at said

control signals which at the receiver station operate to communicate the instruct signal to a specific processor; and

(3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals.

transmitter station one or more control signals which at the receiver station operate to communicate the instruct signal to a specific processor; and

(3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals.

Comparison of claim 11 from Serial No. 08/477,805 to claim 25 from Serial No. 08/449,523.

Claim 11

A method of controlling a remote television transmitter station to communicate television program material to one or more receiver stations, with said remote television transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of television programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of television programming, a television receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of television programming in response to detected specific control signals, and to deliver at

Claim 25

A method of controlling a remote television transmitter station to communicate television program material to one or more receiver stations, with said remote television transmitter station including a broadcast or cablecast transmitter for transmitting one or more units of television programming, a plurality of selective transmission devices each operatively connected to said broadcast or cablecast transmitter for communicating a unit of television programming, a television receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transmission devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the communication of specific units of television programming in response to detected specific control signals, and to deliver at

its broadcast or cablecast transmitter one or more units of television programming, said method of communicating comprising the steps of:

(1) receiving a unit of television programming to be transmitted by the remote intermediate television transmitter station and delivering said unit of television programming to a transmitter;

(2) receiving one or more control signals which at the remote intermediate television transmitter station operate to control the communication of *a specific one or more of said plurality of units* of television programming; and

(3) transmitting said one or more control signals to said transmitter before a specific time.

its broadcast or cablecast transmitter one or more units of television programming, said method of communicating comprising the steps of:

(1) receiving a unit of television programming to be transmitted by the remote intermediate television transmitter station and delivering said unit of television programming to a transmitter, *said unit of television programming having an instruct signal which is effective at the one or more receiver stations to implement a television signalling scheme;*

(2) receiving one or more control signals which at the remote intermediate television transmitter station operate to control the communication of *said unit* of television programming; and

(3) transmitting said one or more control signals to said transmitter before a specific time.